



NEW MEXICO

ENVIRONMENT DEPARTMENT

Ground Water Quality Bureau

1190 Saint Francis Drive / PO Box 5469

Santa Fe, NM 87502-5469

Phone (505) 827-2900 Fax (505) 827-2965

www.env.nm.gov



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GROUND WATER QUALITY BUREAU

DISCHARGE PERMIT –RENEWAL AND MODIFICATION

Issued under 20.6.2 NMAC

Facility Name: Southwest Cheese Company, LLC
Discharge Permit No: DP-1508
Facility Location: 1141 Curry Road 4
Sections 12 and 13, T01N, R35E; and
Sections 7 and 18, T01N, R36E
County: Curry
Facility Owner/Operator: Eric Denton, Site Director
Mailing Address: 1141 Curry Road 4
Clovis, NM 88101
Permitting Action: Renewal and Modification
Source Classification: Agriculture – Food Processing
Permit Issuance Date: DATE
Permit Expiration Date: DATE
NMED Permit Contact: Sarah Schnell
Telephone Number/Email: (505) 660-8368/sarah.schnell@state.nm.us

MICHELLE HUNTER
Chief, Ground Water Quality Bureau
New Mexico Environment Department

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PART A GENERAL INFORMATION

A100 Introduction

- A. The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal and Modification (Discharge Permit), **DP-1508**, to Southwest Cheese Company, LLC (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 through 74-6-17, and the New Mexico Ground and Surface Water Protection Regulations, 20.6.2 NMAC. NMED's purpose in issuing this Discharge Permit is to control the discharge of water contaminants from Southwest Cheese ("Facility") for the protection of groundwater and those segments of surface water gaining from groundwater inflow, for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health.
- B. The Permittee is discharging up to 2,714,000 gallons per day (gpd) of effluent from Southwest Cheese. This discharge or leachate may move directly or indirectly into groundwater of the State of New Mexico which has an existing concentration of 10,000 milligrams per liter (mg/L) or less of total dissolved solids (TDS) within the meaning of Section 20.6.2.3104 and Subsection A of 20.6.2.3101 NMAC. These discharges may contain water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC in compliance with the terms and conditions of this Discharge Permit.
- C. In issuing this Discharge Permit, NMED has determined that the Permittee has met the requirements of Subsection C of 20.6.2.3109 NMAC. Pursuant to Section 20.6.2.3104 NMAC, it is the Permittee's responsibility to comply with the terms and conditions of this Discharge Permit; failure to do so may result in enforcement action by NMED (20.6.2.1220 NMAC).

A101 Terms of Permit Issuance

- A. **Permit Duration** - Pursuant to WQA 74-6-5(I) and Subsection H of 20.6.2.3109 NMAC, the term of a Discharge Permit shall be for the fixed term of **five years** from the effective date of the Discharge Permit. Modification to an existing Discharge Permit does not change these terms.
- B. **Permit Modification** - Modifications to existing DP-1508 represented herein consist of a change in the quality of the wastewater discharge, combining cheese process wastewater with the reverse osmosis wastewater, prior to discharge. These process wastewaters were previously discharged separately, to designated Land Application Areas (LAAs), and now will be combined for discharge to all permitted LAAs.
- C. **Permit Fees** – Payment of permit fees is due at the time of Discharge Permit approval. Permit fees shall be paid in a single payment or shall be paid in equal installments on a yearly basis over the term of the Discharge Permit. Single payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date. Initial installment payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date; subsequent installment payments shall be remitted to NMED no later than the anniversary of the

Discharge Permit effective date. Permit fees are associated with issuance of this Discharge Permit. Nothing in this Discharge Permit relieves the Permittee of the obligation to pay all permit fees assessed by NMED. A Permittee that ceases discharging or does not commence discharging from the facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. An approved Discharge Permit shall be suspended or terminated if the facility fails to remit an installment payment by its due date. [Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]

- D. **Permit Renewal** - To renew this Discharge Permit, the Permittee shall submit, in accordance with Section G of 20.6.2 NMAC, an application and any associated fees for renewal, renewal and modification, or renewal for closure at least 120 days before the discharge permit expiration date, unless closure of the facility is approved by NMED before that date.
- E. **Transfer of Ownership** - This Discharge Permit is being issued to Southwest Cheese Company, LLC as identified in **Section A100** above. In accordance with Section 20.6.2.3111 NMAC, the Permittee, any listed owner(s) of record, and any other holder(s) of an expired discharge permit are responsible for complying with the conditions listed herein. If during the duration of this Discharge Permit a change in the list of responsible persons is required, transfer of ownership shall be completed in accordance with Section 20.6.2.3111(A).

A102 Applicable Regulations

- A. **Scope** - This Discharge Permit applies solely for the regulation of process wastewater and domestic wastewater generated by facility operations and does not include regulation of stormwater. Stormwater generated at the facility is regulated by NPDES Permit #NMR05J00R.
- B. The discharge from the facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.
- C. Groundwater quality as observed in on-site monitoring wells is subject to the criteria of Sections 20.6.2.3101 and 20.6.2.3103 NMAC unless otherwise specified in this Discharge Permit.
- D. Complying with the applicable requirements of 20.6.2 NMAC does not relieve a facility's owner, operator or Permittee from complying with the requirements of other applicable local, state and federal regulations or laws.

A103 Facility: Physical Description

- A. This facility is located at 1141 Curry Road 4, approximately five miles south of Clovis, in Sections 12 and 13, T01N, R35E, and in Sections 7 and 18, T01N, R36E, Curry County.
- B. This facility is comprised of the following wastewater system components as identified in the application received September 29, 2020, and the administrative record which includes the original Discharge Permit issued on June 15, 2005, subsequently renewed and modified on January 28, 2016, as of the effective date of this Discharge Permit:

1. Wastewater Impoundments

- a. **LRAL** (low-rate anaerobic lagoon) – a double-lined synthetic, multi-stage 15,000,000 gallon digester equipped with leak detection and a floating top cover for the capture and recovery of methane gas. The LRAL is located at the Wastewater Treatment Facility (WWTF), on the east side of the SWC main facility. The purpose of this impoundment is to facilitate the anaerobic reduction of BOD in the wastewater. The LRAL was constructed in 2006, and is designed for a 10-day retention time at the facility's current food process wastewater discharge rate of 1.9MGD. Wastewater is discharged from the LRAL to the ASB.
- b. **ASB** (activated sludge basin) – a 2,200,000 gallon concrete tank equipped with aeration devices to further facilitate reduction of BOD and COD in the wastewater, after processing through the LRAL. The ASB was constructed in 2006 and is designed for 35-hour retention time at the facility's current food process wastewater discharge rate of 1.9MGD. Wastewater is discharged from the ASB to the final clarifier.
- c. **Final Clarifier** – a 404,000 gallon concrete tank that receives wastewater that has been processed through the LRAL and ASB. The clarifier was constructed in 2006 and acts to manage wastewater solids for removal prior to distribution to the effluent pump station and LAAs.
- d. **Stormwater** – Multiple stormwater impoundments exist at the site. Stormwater and the associated infrastructure are regulated by NPDES MSGP #NMR05J00R. Stormwater is not discharged to Land Application Areas.
- e. **Reverse Osmosis Retentate tanks** – two 10,000 gallon aboveground holding tanks located outside the food processing facility to store retentate from the facility's reverse osmosis system.
- f. **Septic System** – a septic tank leach field designed for up to 18,000 gallons per day.

2. Fields or tracts within the land application area

- a. **SWC 1** – 60 acres, located immediately north of the SWC facility. Prior to 2019, wastewater was applied to 90 acres of field in this location. This LAA has actively received wastewater since early 2006. Wastewater is applied by a center pivot.
- b. **SWC 2** – 120 acres, located northeast of the SWC facility. This LAA has actively received wastewater since October 2005. Wastewater is applied by a center pivot.
- c. **SWC 3** – 113 acres, located west of the SWC facility. This LAA has actively received wastewater since October 2005. Wastewater is applied by a center pivot.
- d. **SWC 4** – 118 acres, located southwest of the SWC facility. This LAA has actively received wastewater since November 2005. Wastewater is applied by a center pivot.
- e. **SWC 5** – 81 acres, located southwest of the SWC facility. This LAA has actively received wastewater since October 2005. Wastewater is applied by a center pivot.
- f. **SWC 6** – 125 acres, located southeast of the SWC facility. This LAA has actively received wastewater since early 2006. Wastewater is applied by a center pivot.

- g. **RO-1, RO-2, and RO-3** – three 30 acre fields, located east of the SWC facility. These fields have historically received RO retentate since 2005 via three center pivots, and will now receive combined RO and food process wastewaters.
- h. **SWC 7** – 85 acres, located northeast of the SWC facility. This LAA has never received wastewater. Wastewater will be applied by a center pivot.
- i. **SWC 8** – 104 acres, located northeast of the SWC facility. This LAA has never received wastewater. Wastewater will be applied by a center pivot.
- j. **JF 1** – 120 acres, located north of the SWC facility. This LAA has never received wastewater. Wastewater will be applied by a center pivot.

These system components identified are potential sources of groundwater contamination. **Section B100** lists all wastewater system components authorized to discharge under this Discharge Permit.

A104 Facility: Documented Hydrogeologic Conditions

- A. Groundwater most likely to be affected at this facility is at a depth of approximately 300 feet and has a total dissolved solids concentration of 400 milligrams per liter.

PART B DISCHARGE REQUIREMENTS

B100 Facility: Authorized Discharge

- A. NMED authorizes the Permittee to discharge water contaminants as part of facility operations subject to the following requirements:
 - 1. The Permittee is authorized to discharge up to 2,700,000 gpd of combined wastewater originating from the food process area and reverse osmosis retentate. Wastewater flows to a low-rate anaerobic lagoon (LRAL), to an activated sludge basin (ASB), and final clarifier, prior to being applied by center pivot irrigation to up to 1,016 acres of irrigated cropland under cultivation. NMED authorizes an additional 14,000 gpd of domestic wastewater discharged to septic tank leach field.
 - 2. The Permittee is authorized to use the following impoundments for the following purposes in accordance with Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC:
 - a. **LRAL** – authorized to receive wastewater for collection prior to land application. This impoundment **exists** as of the effective date of this Discharge Permit
 - b. **ASB** – authorized to receive wastewater for collection prior to land application. This impoundment **exists** as of the effective date of this Discharge Permit
 - c. **Clarifier** – authorized to receive wastewater for collection prior to land application. This impoundment **exists** as of the effective date of this Discharge Permit
 - d. **Septic tanks** – authorized to receive domestic wastewater before discharge to a leach field.

3. NMED authorizes the Permittee to apply process wastewater to fields within the land application area in accordance with Subsection C of 20.6.2.3109 NMAC. The land application area is comprised of the following fields for a total area of 1,016 acres:
 - a. **SWC 1** – authorized by the last Discharge Permit dated January 28, 2016, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.
 - b. **SWC 2** – authorized by the last Discharge Permit dated January 28, 2016, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.
 - c. **SWC 3** – authorized by the last Discharge Permit dated January 28, 2016, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.
 - d. **SWC 4** – authorized by the last Discharge Permit dated January 28, 2016, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.
 - e. **SWC 5** – authorized by the last Discharge Permit dated January 28, 2016, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.
 - f. **SWC 6** – authorized by the last Discharge Permit dated January 28, 2016, to receive wastewater and *has* received wastewater as of the effective date of this Discharge Permit.
 - g. **SWC 7** – not authorized by the last Discharge Permit dated January 28, 2016, to receive wastewater and *has not* received wastewater as of the issued date of this Discharge Permit.
 - h. **SWC 8** – not authorized by the last Discharge Permit dated January 28, 2016, to receive wastewater and *has not* received wastewater as of the issued date of this Discharge Permit.
 - i. **JF 1** -- not authorized by the last Discharge Permit dated January 28, 2016, to receive wastewater and *has not* received wastewater as of the issued date of this Discharge Permit.
 - j. **RO Fields** – authorized by the last Discharge Permit dated January 28, 2016, as individual fields RO-1, RO-2, and RO-3, to receive wastewater and *have* received wastewater as of the effective date of this Discharge Permit.
- B. This Discharge Permit authorizes only those discharges specified herein. Any unauthorized discharges, such as spills or leaks, must be reported to NMED in a corrective action conducted pursuant to Section 20.6.2.1203 NMAC.

B101 Existing System Controls

- A. The Permit requires the following existing system controls at this facility as described below:

1. **Impoundment(s)** - The Permittee shall maintain operations of the existing impoundment(s) as listed in **Section A104** above in accordance with conditions listed in **Table B2** to achieve compliance with this Discharge Permit.
2. **Flow Meters** - The facility measures the volume of (1) wastewater discharged from the processing plant and (2) wastewater discharged to the land application area using the following flow meters [Subsection A of 20.6.2.3107 NMAC]:
 - a. **WWTF Influent Flow Meter** - located at the WWTF to measure the volume of wastewater discharged from the processing plant to the WWTF. **WWTF Effluent Flow Meter** - located at the WWTF to measure the volume of wastewater discharged from the WWTF to the land application areas.
 - b. **RO Retentate Flow Meter** - located at the RO pump station to measure the volume of RO retentate discharged from the processing plant to the WWTF.
 - c. **SWC 1-6 Fields Flow Meters** - located at each corresponding land application area to measure the volume of wastewater discharged from the WWTF and applied to the corresponding Field.
 - d. **SWC 7 & 8 Fields Flow Meters** - to be located at each corresponding land application area to measure the volume of wastewater discharged from the WWTF and applied to each field, required to be installed by this Discharge Permit.
 - e. **JF 1 Flow Meter** - to be located at the land application area to measure the volume of wastewater discharged from the WWTF and applied to the corresponding Field, required to be installed by this Discharge Permit.
 - f. **RO 1-3 Flow Meters** - located at each corresponding land application area to measure the volume of wastewater discharged from the WWTF and applied to the corresponding field.
 - g. **Domestic Wastewater Meter** - located between the facility and septic tanks to measure the volume of wastewater discharged from sanitary wastewater drains to the septic tanks and leach field.
 - h. **LRAL Leak Detection Meters (2)** - located at the north and south ends of the LRAL to facilitate leak detection monitoring.
3. **Monitoring Wells** - The facility uses the following monitoring wells to supply data representative of groundwater quality [Subsection A of 20.6.2.3107 NMAC]:
 - a. **MW-1** - hydrologically upgradient of SWC 3, approximately 20 feet northwest of SWC 3.
 - b. **MW-2** - hydrologically cross-gradient to the WWTF, approximately 20 to feet east of the WWTF.
 - c. **MW-3** - hydrologically cross-gradient to the RO fields, approximately 20 feet southeast of RO 2.
 - d. **MW-4** - hydrologically cross-gradient to SWC 6, approximately 50 feet southeast of SWC 6.

- e. **MW-5** - hydrologically downgradient of SWC 2, approximately 20 feet northeast of SWC 2.

B102 Conditions for Operation

- A. NMED has reviewed the permit application for the proposed facility and has determined that the provisions of the applicable groundwater quality standards will be met in accordance with this Discharge Permit. General conditions for all Discharge Permits issued by the Ground Water Quality Bureau pursuant to NMAC 20.6.2 are summarized on **Table B1**. Unless otherwise specified in Parts A or B of this Discharge Permit, both the general conditions for a facility discharge permit (as listed in this part) and facility-specific conditions as listed are mandated to assure continued compliance.

Table B1
General Discharge Permit Conditions:

Engineering and Surveying	
a)	Within 180 days following the effective date of this Discharge Permit (by DATE), the Permittee shall submit an up-to-date diagram of the layout of entire facility to NMED. The diagram shall include the following elements: <ul style="list-style-type: none">• north arrow• effective date of the diagram• overall facility layout• sumps• solids separators/settling basins• wastewater impoundments• irrigation water mix tanks• fields within the land application area with identification and acreage labeled• groundwater monitoring wells• irrigation wells• meters measuring wastewater discharges to the impoundments• meters measuring wastewater applied to the land application area• wastewater distribution pipelines• each ditch irrigation system, acequia, irrigation canal and drain• backflow prevention methods or devices• wastewater sampling locations• septic tanks and leach fields

Table B1
General Discharge Permit Conditions:

Any element that cannot shown due to its location inside of existing structures, or because it is buried without surface identification, shall be on the diagram in a schematic format and identified as such. [Subsection C of 20.6.2.3106 NMAC, Subsection A of 20.6.2.3107 NMAC]
Operations and Maintenance
<p>b) Operate in a manner such that standards and requirements of Sections 20.6.2.3101, 20.6.2.3103 are not violated.</p> <p>c) The permittee shall utilize operators, certified by the State of New Mexico at the appropriate level, to operate the wastewater collection, treatment and disposal systems. The operations and maintenance of all or any part of the wastewater system shall be performed by, or under the direct supervision of, a certified operator. [Subsection C of 20.6.2.3109 NMAC, 20.7.4 NMAC]</p> <p>d) Maintain all fencing around the facility to control access by the general public and animals.</p> <p>e) Maintain all signage indicating that the wastewater at the facility is not potable. All signage shall be printed in English and Spanish and shall remain visible and legible.</p> <p>f) Repair or replace compromised pipe(s) or fixture(s) within 72 hours of discovery.</p>
Inspection and Monitoring
g) Visually inspect all facility pipes and fixtures on a weekly basis for evidence of leaks or failure. [20.6.2.3107 NMAC]
Recordkeeping and Reporting
<p>h) Maintain written records at the facility of any inspection(s), repairs and maintenance conducted on facility infrastructure as related the wastewater management system.</p> <p>i) Conduct the monitoring, reporting, and other requirements in accordance with the monitoring requirements of this Discharge Permit. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p> <p>j) Unless otherwise specified by this Discharge Permit, or approved in writing by NMED, the Permittee shall use sampling and analytical techniques that conform with the references listed in Subsection B of 20.6.2.3107 NMAC</p> <p>k) Unless otherwise identified in this Discharge Permit, submit monitoring reports to NMED quarterly according to the following schedule: [Subsection A of 20.6.2.3107 NMAC]</p> <ul style="list-style-type: none"> • January 1 through March 31 (first quarter) – report due by May 1 • April 1 through June 30 (second quarter) – report due by August 1 • July 1 through September 30 (third quarter) – report due by November 1 • October 1 through December 31 (fourth quarter) – report due by February 1 <p>l) Retain required records for a minimum period of 10 years from the date of any sample collection, measurement, report or application in accordance with 20.6.2.3107 NMAC, 74-6-5 WQA.</p>

- B. **Impoundment(s)** - The Permittee shall manage all impoundments at the facility in accordance with 20.6.2.3107 and 20.6.2.3109 NMAC and the conditions summarized in **Table B2** below.

Table B2
Impoundment(s)

Engineering, Surveying and Construction and/or Improvements
a) None required.
Operations and Maintenance of All Impoundments
<p>b) Maintain impoundments to prevent conditions which could affect the structural integrity of the impoundments and associated liners. Such conditions include or may be characterized by the following:</p> <ul style="list-style-type: none"> • Erosion damage • Animal burrows or other damage • The presence of large debris or large quantities of debris in the impoundment • Evidence of seepage • Evidence of berm subsidence • The presence of vegetation including aquatic plants, weeds, woody shrubs or trees growing within five feet of the top inside edge of a sub-grade impoundment, within five feet of the toe of the outside berm of an above-grade impoundment, or within the impoundment itself. Vegetation growing around the impoundment shall be routinely controlled by mechanical removal in a manner that is protective of the impoundment liner.
Inspection and Monitoring All Impoundments
<p>c) Visually inspect impoundments and surrounding berms on a monthly basis to ensure proper condition and control vegetation growing around the impoundments in a manner that is protective of the liners.</p> <p>d) Visually inspect pipes and fixtures on a weekly basis for evidence of leaks or failure. In areas where pipes and fixtures cannot be visually inspected because they are buried, visually inspect the area directly surrounding the features for evidence of leaks or failure (e.g., saturated surface soil, surfacing wastewater, etc.).</p> <p>e) Upon initial discovery of leachate in either of the leak detection systems, the permittee shall collect a sample(s) from the individual system(s) and analyze for NO₃-N, TKN, Cl and TDS. Analytical results shall be submitted to NMED with the next quarterly monitoring report. Should leachate continue to accumulate in either of the leak detection systems such that it is routinely pumped, a sample shall be collected semi-annually and analyzed for NO₃-N, TKN, Cl and TDS. Results shall be submitted to NMED with the monitoring reports due February 1st and August 1st each year.</p> <p>f) The Permittee shall collect a composite wastewater sample on a quarterly basis from each impoundment. The composite sample(s) shall consist of a minimum of six equal sub-samples collected around the entire perimeter of the evaporative impoundment and thoroughly mixed. The composite sample(s) shall be analyzed for TKN, NO₃-N, TDS, Cl, and pH. Samples shall be properly prepared, preserved, transported and analyzed in accordance with the methods authorized in this Discharge Permit. Analytical results shall be submitted to NMED in the <u>Quarterly Monitoring Report</u>.</p>
Recordkeeping and Reporting All Impoundments
g) Report any unauthorized discharges to NMED pursuant to 20.6.2.1203 NMAC.

Table B2
Impoundment(s)

- h) Unless otherwise specified in this Discharge Permit, submit all monitoring information quarterly as part of the required the **Quarterly Monitoring Report** in accordance with the general reporting schedule listed in Table B1 of this Discharge Permit.
- i) Notify NMED within 24 hours of discovery of any observed impoundment condition(s) that may impact the structural integrity of a berm or liner or that may result in an unauthorized discharge. [20.6.2.3107 NMAC]
- j) Maintain written records at the facility of all facility inspections including repairs and replacements.

- C. **Land Application Area Management** - The Permittee shall manage all land application areas at the facility in accordance with 20.6.2.3107 and 20.6.2.3109 NMAC and the conditions summarized in **Table B3** below.

Table B3
Land Application Area Management

Engineering and Surveying
<p>a) Provide NMED with documentation of the proposed infrastructure necessary to transfer, distribute and apply wastewater to fields within the proposed land application area. Documentation shall include:</p> <ul style="list-style-type: none">• A narrative statement and photographic documentation of the distribution system• Type(s) and location(s) of the system• Method(s) of backflow prevention to be employed <p>b) Prior to discharging to the land application area, the Permittee shall submit documentation of irrigation water rights from the Office of the State Engineer for all fields within the land application area. The Permittee shall demonstrate adequate irrigation water rights are held for irrigation for the term of this Discharge Permit, to produce and harvest crops necessary for the removal of nitrogen.</p> <p>c) Within 180 days following the effective date of this Discharge Permit (by DATE), the Permittee shall install land application area Distribution piping to distribute wastewater to the fields within the land application area, and submit photographic documentation and a written statement confirming the date(s) of installation.</p> <p>d) Any irrigation or supply wells located within the land application area shall have a surface pad constructed in accordance with the recommendations of Subsection G of 19.27.4.29 NMAC and a permanent well cap or cover pursuant to Subsection I of 19.27.4.29 NMAC.</p>
Operations and Maintenance All Land Application Areas
<p>e) The Permittee shall apply wastewater to each field within the land application area containing a crop(s) under cultivation such that the amount of total nitrogen in the combined application of wastewater and fertilizer does not exceed by more than 25% the amount reasonably expected to be taken up by the crop(s) and removed by harvesting in any 12-month period. Nitrogen content shall not be adjusted to account for volatilization or mineralization processes. Wastewater shall be distributed evenly throughout the land application area. Excessive ponding shall be prevented.</p>

Table B3
Land Application Area Management

f) The Permittee shall store solids separated from the wastewater in a manner and frequency necessary to prevent the contamination of groundwater. shall be managed to minimize the generation and infiltration of leachate by diverting stormwater run-on and run-off and by preventing the ponding of water within solids stockpiling.

Solids transported offsite for disposal shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations.

Inspection and Monitoring All Land Application Areas

g) The Permittee shall visually inspect the Land Application distribution piping on a monthly basis to ensure proper maintenance. Any damage to distribution piping shall be repaired within 30 days of discovery. The Permittee shall document all inspection findings and repairs made in a log kept on-site that is available to NMED upon request.

h) The Permittee shall maintain 18-inch to 24-inch berms around the land application area to prevent surface water run-on and run-off. The berms shall be inspected on a regular basis and after any major precipitation event, and repaired as soon as possible following discovery of the damage.

i) The permittee shall continue the use of soil moisture monitoring devices as described in the Technical Memorandum dated November 23, 2004, to monitor the movement of soil water within the crop rooting zone and below the rooting zone to manage crop moisture needs and mitigate deep percolation movement of wastewater constituents. The permittee shall monitor and keep a log recording the presence of deep wetting fronts on a weekly basis for each field in the Land Application Area. The log shall contain the date, monitoring depths, and soil moisture data. A copy of the log entries for the previous 6-month period shall be submitted to NMED in the monitoring reports due by February 1 and August 1 of each year. [Subsection C of 20.6.2.3107 NMAC]

j) Perform initial and routine surface, subsurface, and deep soil sampling in each field within the land application area in Report analytical results and provide a map depicting the soil sampling locations within each field annually to NMED as part of the **Quarterly Monitoring Report** due **May 1**. Composite soil samples shall be collected in the five-month period between September 1 and January 31 for all fields regardless of whether the field is cropped, remains fallow, or has received wastewater. One surface composite soil sample (first-foot), two sub-surface composite soil samples (second-foot and third-foot), and four deep samples (fourth-, sixth-, eighth-, and tenth-foot) shall be collected from each field. Composite soil samples shall be collected and analyzed according to the following procedure:

- Each surface and sub-surface soil sample shall consist of a single composite of 15 soil cores collected randomly throughout each field. Each deep soil sample shall consist of a single composite of three soil cores collected randomly throughout each field. Should a field consist of different soil textures (i.e., sandy and silty clay), a composite soil sample shall be collected from each soil texture within each field.
- Surface soil samples (first-foot) shall be collected from a depth of 0 to 12 inches.
- Each second-foot sub-surface soil sample shall be collected from a depth of 12 to 24 inches.
- Each third-foot sub-surface soil sample shall be collected from a depth of 24 to 36 inches.
- Each fourth-foot deep soil sample shall be collected from a depth of 36 to 48 inches.

Table B3
Land Application Area Management

- Each sixth-foot deep soil sample shall be collected from a depth of 48 to 72 inches.
- Each eighth-foot deep soil sample shall be collected from a depth of 72 to 96 inches.
- Each tenth-foot deep soil sample shall be collected from a depth of 96 to 120 inches.
- Each surface, sub-surface, and deep composite sample shall be analyzed for pH, electrical conductivity (EC), TKN, NO₃-N, Cl, organic matter (OM), potassium (K), phosphorus (P), sodium (Na), calcium (Ca), magnesium (Mg), sulfate (SO₄), soil texture and determination of the sodium adsorption ratio (SAR).
- Soil samples shall be analyzed in accordance with the analytical methodology required by this Discharge Permit. Soil pH, EC, Na, Ca, Mg and SO₄ shall be analyzed using a saturated paste extract. Soil P shall be analyzed using the Olsen sodium bicarbonate method. Soil NO₃-N shall be analyzed by a 2 molar KCl extract.

k) In the event that a cross-connection with fresh water exists, the Permittee shall institute a backflow prevention method to protect wells and public water supply systems from contamination by wastewater prior to discharging to the land application area. Backflow prevention shall be achieved by a total disconnect (physical air gap separation between the discharge pipe and the liquid surface at least twice the diameter of the discharge pipe), or by a reduced pressure principal backflow prevention assembly (RP) installed on the line between the fresh water supply wells or public water supply and the wastewater delivery system. Backflow prevention shall be maintained at all times.

RP devices shall be inspected and tested by a certified backflow prevention assembly tester at the time of installation, repair or relocation and at least on an annual basis thereafter. The backflow prevention assembly tester shall have successfully completed a 40-hour backflow prevention course based on the University of Southern California's Backflow Prevention Standards and Test Procedures, and obtained certification demonstrating completion. A malfunctioning RP device shall be repaired or replaced within 30 days of discovery, and use of all supply lines associated with the RP device shall cease until repair or replacement has been completed. Copies of the inspection and maintenance records and test results for each RP device associated with the backflow prevention program shall be maintained at a location available for inspection by NMED.

Recordkeeping and Reporting All Land Application Areas

l) The Permittee shall collect fresh irrigation water samples from irrigation wells used to supply fresh water to fields within the land application area to account for potential nitrogen supplied to the land application area from fresh irrigation water sources. Each irrigation well shall be identified in association with the field(s) to which it supplies fresh water. A sample shall be collected from each irrigation well annually and analyzed for **NO₃-N and TKN**. Analytical results shall be submitted to NMED in the **Quarterly Monitoring Report due by May 1**.

m) The Permittee shall determine the total nitrogen concentration of each harvested crop grown to verify plant nitrogen removal levels. A composite sample consisting of 15 sub-samples of plant material shall be taken from each field during the final harvest of each crop grown per year. Samples shall be analyzed for percent total nitrogen and percent dry matter. Analytical reports shall be submitted to NMED in the **Quarterly Monitoring Report**.

Table B3
Land Application Area Management

- n) Yield documentation and plant and harvest dates of each crop grown shall be submitted to NMED in the **Quarterly Monitoring Report**. Yield documentation shall consist of scale-weight tickets or harvest summaries based on scale-weights.
- o) The Permittee shall keep a log of when solids are applied to the land application area and submit it to NMED in the **Quarterly Monitoring Report**.
- p) Maintain a log recording for all additional fertilizers applied to each field within the land application area that includes the following:
- Date of fertilizer application
 - Type and form of fertilizer
 - Fertilizer analysis
 - Amount of fertilizer applied (pounds/acre) to each field
 - Amount of nutrients applied (pounds/acre) to each field
- Submit a copy of the current log to NMED as part of each **quarterly Monitoring Report**.
- q) The Permittee shall complete LADS (copy enclosed) on a monthly basis that document the amount of nitrogen applied to each field within the land application area during the most recent 12 months. The LADS shall reflect the total nitrogen concentration from the most recent wastewater analysis and the measured discharge volumes to each field within the land application area for each month. The Permittee shall also report on the LADS the amount of nitrogen (fertilizer, wastewater, etc.) applied, crops grown along with planting and harvest dates, crop yield (tons per acre) and nitrogen concentration of the harvested crop specific to the crops grown. The LADS shall be completed with information above or shall include a statement that application of wastewater did not occur. The LADS shall be submitted to NMED in the **Quarterly Monitoring Report**.

- D. **Solids Management** - The Permittee shall manage all solids at the facility in accordance with 20.6.2.3107 and 20.6.2.3109 NMAC and the conditions summarized in **Table B4** below.

Table B4
Solids Management

Engineering and Surveying	
a) None required.	
Operations and Maintenance	
b) The Permittee shall store and remove solids separated from the wastewater in a manner and frequency necessary to prevent the contamination of groundwater. Solids removed from the LRAL shall be contained, transported, and disposed of in accordance with all local, state, and federal regulations. Disposal of solids on the Land Application Area is prohibited. Solids shall be contained in a waste disposal bin prior to being hauled offsite for final disposal.	
Inspection and Monitoring	

Table B4
Solids Management

c) The Permittee shall inspect the LRAL, at minimum, on a quarterly basis and remove solids as needed to prevent pump failure. The Permittee shall maintain a record of LRAL inspections, repairs and cleanings. Solids generated in the processing area shall be stored and transported off-site in accordance with the conditions of this Discharge Permit.
Recordkeeping and Reporting
d) The Permittee shall, at all times, have the log of sump inspections, repairs, and cleanings available for NMED review.

- E. **Flow Meters** – Pursuant to 20.6.2.3107 (A) and 20.6.2.3109 (C), the Permittee shall employ a flow metering system that uses flow measurement devices (flow meters) to measure the volume(s) of 1) wastewater discharged from the processing plant and 2) wastewater transferred and land applied at the facility. All flow meters employed at the facility shall be managed in accordance with the conditions listed in **Table B5** below.

Table B5
Flow Meters

Engineering and Surveying
a) None required.
Operations and Maintenance
b) Within 90 days of effective date of this Discharge Permit (by DATE), install the following flow meter(s) in accordance with the approved Flow Metering Plan : <ul style="list-style-type: none">• SWC 7 Flow Meter – to be located at the land application area. Measure the volume of wastewater discharged from the WWTF to field SWC 7• SWC 8 Flow Meter – to be located at the land application area. Measure the volume of wastewater discharged from the WWTF to field SWC 8• JF 1 Flow Meter – to be located at the land application area. Measure the volume of wastewater discharged from the WWTF to field JF 1
c) All flow meters shall be calibrated in accordance with the manufacturer's requirements prior to installation or reinstallation following repair.
Inspection and Monitoring
d) The Permittee shall measure the monthly volume of wastewater discharged to the WWTF. The Permittee shall obtain readings from the totalizing flow meters located on the discharge line between the processing area and the WWTF (WWTP Influent Flow Meters), between the RO pump station and the WWTF (RO Retentate Flow Meter), on a monthly basis and calculate the monthly and average daily volume discharged to the WWTF. The monthly meter readings, and calculated monthly and average daily discharge volumes shall be submitted to NMED in the Quarterly Monitoring Report .
e) The Permittee shall measure the monthly volume discharged from the WWTF to each field within the land application area using totalizing flow meters. The meters shall be located on the discharge line between the WWTF and the corresponding land application area(s). The Permittee shall maintain a log that records the date that discharges occur to each field, monthly totalizing meter readings and units of measurement.

Table B5
Flow Meters

The log shall be used to calculate the total monthly volume of wastewater discharged to each field. The monthly volume discharged to each field shall be used on the LADS to calculate nitrogen loading. A copy of the log shall be submitted to NMED in the **Quarterly Monitoring Report**.

- f) The Permittee shall measure the monthly volume discharged from the to the septic tank/leach field using a totalizing flow meter. The meters shall be located on the discharge line between the facility and the septic tanks. The Permittee shall maintain a log that records monthly totalizing meter readings and units of measurement. A copy of the log shall be submitted to NMED the **Quarterly Monitoring Report**.
- g) Visually inspect flow meters on a weekly basis for evidence of malfunction. If a visual inspection indicates a flow meter is not functioning to measure flow, the Permittee shall initiate repair or replacement of the meter within 30 days of discovery.

Recordkeeping and Reporting

- h) Within 30 days of meter installation, submit a **Confirmation of Installation** report to NMED that includes: a description of the device type, manufacturer, meter identification, location, record drawings, and a copy of the manufacturer's certificate of calibration and a copy of the manufacturer's recommended maintenance schedule.
- i) Maintain copies of the manufacturer's certificate of calibration and the manufacturer's recommended maintenance schedule at the facility.
- j) Record of meter readings at intervals not to exceed monthly. The average daily discharge volume for each recording interval shall be calculated by dividing the difference between the meter readings by the number of days between meter readings.
- k) Record meter readings (without adjustments or deductions) and submit in the **Quarterly Monitoring Report**. Include the date, time and units of each measurement, and calculations for the average daily volumes of wastewater discharged from the processing area, reported in gallons per day.
- l) For meters requiring repair, submit a report to NMED with the subsequent monitoring report following the repair that includes a description of the malfunction, a statement verifying the repair, and a copy of the manufacturer's or repairer's certificate of calibration.
- m) For meters requiring replacement, submit a report to NMED with the subsequent monitoring report following the replacement that includes plans for the device, a copy of the manufacturer's certificate of calibration, and a copy of the manufacturer's recommended maintenance schedule.
- n) The Permittee shall maintain a log of repairs. The log shall be available, at all times, for NMED inspection.

- F. **Monitoring Well(s)** - Pursuant to 20.6.2.3107 (A) and 20.6.2.3109 (C), the Permittee is required to install monitoring wells at appropriate depths and locations to monitor groundwater quality. The approved groundwater monitoring well system at the facility is detailed in **Table B6** below.

Table B6
Groundwater Monitoring Wells

Engineering and Surveying
<p>a) Within 60 days following the effective date of this Discharge Permit (by DATE), the Permittee shall submit a written monitoring well location proposal for review and approval by NMED. The proposal shall designate the locations of all monitoring wells required to be installed by this Discharge Permit. The proposal shall include, at a minimum, the following information:</p> <ul style="list-style-type: none">• A map showing the proposed location of the monitoring well(s) from the boundary of the source it is intended to monitor• A written description of the specific location proposed for the monitoring well(s) including the distance (in feet) and direction of the monitoring well(s) from the edge of the source it is intended to monitor. Examples include: 35 feet north-northwest of the northern berm of the synthetically lined impoundment; 30 feet southeast of the land application area; 150 degrees from north• A statement describing groundwater flow direction beneath the facility, and documentation and/or data supporting the determination <p>All proposed monitoring well locations shall be approved by NMED prior to installation. [NMSA 1978, § 74-6-5.D, Subsection B of 20.6.2.3109 NMAC]</p> <p>b) Within 90 days following the effective date of this Discharge Permit (by DATE), the Permittee shall construct a surface pad and provide a permanent well cap cover for each supply well located within the land application area. The surface pad shall be constructed in accordance with the recommendations of Subsection G of 19.27.4.29 NMAC and the well cap installed pursuant to Subsection I of 19.27.4.29 NMAC. Written confirmation of installation of these supply well protection measures, including photographic documentation, shall be submitted to NMED with the next Quarterly Monitoring Report.</p> <p>c) Within 12 months following the effective date of this Discharge Permit (by DATE), the permittee shall provide an update to the site's existing groundwater fate and transport model to incorporate additional wells, fields, and changes to water quality.</p>
Operations and Maintenance
<p>d) Within 120 days following written approval from NMED for proposed monitoring well location(s), install and complete the following additional groundwater monitoring wells:</p> <ul style="list-style-type: none">• MW-6, hydrologically downgradient of fields SWC 7 and SWC 8• JM-1, hydrologically downgradient of field JF 1 <p>All new wells shall be completed in accordance with the attachment titled <i>Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011</i>. Construction and lithologic logs shall be submitted to NMED within 30 days of well completion.</p> <p>e) Following installation of the monitoring wells required by this Discharge Permit, the Permittee shall sample groundwater in the wells and analyze the samples for TKN, NO₃-N, TDS, and Cl. Groundwater sample collection, preservation, transport and analysis shall be performed according to the following procedure:</p> <ul style="list-style-type: none">• Measure the depth-to-most-shallow groundwater from the top of the well casing to the nearest hundredth of a foot.

Table B6
Groundwater Monitoring Wells

- Purge three well volumes of water from the well prior to sample collection.
- Obtain samples from the well for analysis.
- Properly prepare, preserve and transport samples.
- Analyze samples in accordance with the methods authorized in this Discharge Permit.

Depth-to-most-shallow groundwater measurements, analytical results, including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well shall be submitted to NMED within 30 days of the completion of the monitoring well survey.

Inspection and Monitoring

- f) Perform quarterly groundwater sampling for all facility monitoring wells as identified in Section B101 A.3 and analyze the samples for TKN, NO₃-N, TDS, and Cl. Groundwater sample collection, preservation, transport and analysis shall be performed according to the following procedure:
- Measure the depth-to-most-shallow groundwater from the top of the well casing to the nearest hundredth of a foot.
 - Purge three well volumes of water from the well prior to sample collection.
 - Obtain samples from the well for analysis.
 - Properly prepare, preserve and transport samples.
 - Analyze samples in accordance with the methods authorized in this Discharge Permit.

Depth-to-most-shallow groundwater measurements, analytical results, including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well shall be submitted to NMED in the Quarterly Monitoring Report.

- g) The Permittee shall develop a groundwater elevation contour map on a quarterly basis using the top of casing elevation data from the monitoring well survey and quarterly depth-to-most-shallow groundwater measurements obtained from the groundwater monitoring wells required by this Discharge Permit.

The groundwater elevation contour map shall depict the groundwater flow direction based on the groundwater elevation contours. Groundwater elevations between monitoring well locations shall be estimated using common interpolation methods. A contour interval appropriate to the data shall be used, but in no case shall the interval be greater than two feet. Groundwater elevation contour maps shall depict the groundwater flow direction, using arrows, based on the orientation of the groundwater elevation contours, and the location and identification of each monitoring well and contaminant source. The groundwater elevation contour map shall be submitted to NMED in the Quarterly Monitoring Report.

- h) Prior to the expiration date of this Discharge Permit, NMED shall have the option to perform one downhole inspection of each monitoring well identified in this Discharge Permit. NMED shall establish the inspection date and provide at least 60 days' notice to the Permittee by certified mail. The Permittee shall have any existing dedicated pumps removed at least 48 hours prior to NMED inspection to allow adequate settling time of any sediment agitated as a result of pump removal.

Recordkeeping and Reporting

Table B6
Groundwater Monitoring Wells

i) Within 150 days following the effective date of this Discharge Permit, the Permittee shall survey all wells approved by NMED for Discharge Permit monitoring purposes to a U.S. Geological Survey (USGS) or other permanent benchmark. Survey data shall include northing, easting and elevation to the nearest hundredth of a foot or shall be in accordance with the "Minimum Standards for Surveying in New Mexico" (12.8.2 NMAC). A survey elevation shall be established at the top-of-casing, with a permanent marking indicating the point of survey. The survey shall bear the seal and signature of a licensed New Mexico professional surveyor (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority).

Depth-to-most-shallow groundwater shall be measured to the nearest hundredth of a foot in all surveyed wells, and the data shall be used to develop a groundwater elevation contour map showing the location of all monitoring wells and the direction and gradient of groundwater flow at the facility. The data and groundwater elevation contour map shall be submitted to NMED within 30 days of survey completion.

j) A **Quarterly Monitoring Report** shall be filed with NMED in accordance with the general reporting schedule listed in **Table B1**. Each **Quarterly Monitoring Report** shall contain, at a minimum, the following information:

- Facility map with location and number of each well in relation to the contamination source it is intended to monitor
- Depth-to-shallowest groundwater measurements
- Field parameter measurements and parameter stabilization log
- Analytical results (including the laboratory quality assurance and quality control summary report)
- Groundwater elevation contour maps utilizing elevation contours of 2 ft or less

B103 Facility: Conditions for Closure

A. For permanent closure, the following closure actions shall be completed upon permanent cessation of wastewater discharge:

1. Within 60 days of ceasing discharging to the impoundment(s), the line leading to the impoundment(s) shall be plugged so that a discharge can no longer occur.
2. Within 60 days of ceasing discharging to the impoundment(s), wastewater shall be evaporated or drained from the impoundment and any other wastewater system components and disposed of in accordance with all local, state, and federal regulations. OR discharged from the impoundment and any other wastewater system components to the land application area, as authorized by this Discharge Permit. The discharge of accumulated solids (sludge) from the impoundment to the land application is prohibited.
3. Within 90 days of ceasing discharging to the impoundment(s), the Permittee shall submit a sludge removal and disposal plan to NMED for approval. The Permittee shall initiate implementation of the plan within 30 days following approval by NMED. The sludge

removal and disposal plan shall include the following information.

- a. The estimated volume and dry weight of sludge to be removed and disposed, including measurements and calculations.
 - b. Analytical results for samples of the sludge taken from the impoundment for TKN, NO₃-N, percent total solids, and any other parameters tested (reported in mg/kg, dry weight basis).
 - c. The method(s) of sludge removal from the impoundment(s).
 - d. The method(s) of disposal for all of the sludge (and its contents) removed from the impoundment(s). The method(s) shall comply with all local, state and federal regulations, including 40 CFR Part 503. *Note: A proposal that includes the surface disposal of sludge may be subject to Ground Water Discharge Permitting requirements pursuant to 20.6.2.3104 NMAC that are separate from the requirements of this Discharge Permit.*
 - e. A schedule for completion of sludge removal and disposal not to exceed two years from the date discharge to the impoundment(s) ceased.
4. Within one year following completion of the sludge removal and disposal, the Permittee shall complete the following closure measures.
- a. Remove all lines leading to and from the impoundment(s), or permanently plug and abandon them in place.
 - b. Remove or demolish any other wastewater system components and re-grade area with suitable fill to blend with surface topography, promote positive drainage and prevent ponding.
 - c. Perforate or remove the impoundment liner(s).
 - d. Fill the impoundment(s) with suitable fill.
 - e. Re-grade the impoundment site to blend with surface topography, promote positive drainage and prevent ponding.
5. The Permittee shall continue groundwater monitoring until the requirements of this condition have been met and groundwater monitoring confirms for a minimum of eight (8) consecutive quarterly groundwater sampling events that the standards of Section 20.6.2.3103 NMAC are not exceeded and toxic pollutants are not present in groundwater.
- If monitoring results show that a groundwater quality standard in Section 20.6.2.3103 NMAC is exceeded, the total nitrogen concentration in groundwater exceeds 10 mg/L, or a toxic pollutant as defined in Section of 20.6.2.7 NMAC is present in groundwater, the Permittee shall implement the contingency plan required by this Discharge Permit.
6. Following notification from NMED that post-closure monitoring may cease, the Permittee shall plug and abandon the monitoring well(s) in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions*, Revision 1.1, March 2011.
7. When all closure and post-closure requirements have been met, the Permittee may request to terminate the Discharge Permit [20.6.2.3109 NMAC, 20.6.2.3107. NMAC].

B104 Facility: Contingency Plan

- A. In the event NMED or the Permittee identifies any failures of the Discharge Permit or system not specifically noted herein, NMED may require the Permittee to develop for NMED approval a contingency or corrective action plan and schedule to cope with the failure(s) [20.6.2.3107.A(10) NMAC].
- B. Facility conditions that will invariably require Permittee action under one or more contingency plans include:

1. **Exceedance of groundwater quality standards** – In the event that groundwater monitoring indicates that a groundwater quality standard identified in Section 20.6.2.3103 NMAC is exceeded; the total nitrogen concentration in groundwater is greater than 10 mg/L; or a toxic pollutant (defined in Subsection WW of 20.6.2.7 NMAC) is present in a groundwater sample and in any subsequent groundwater sample collected from a monitoring well required by this Discharge Permit, the Permittee shall enact the following contingency plan:

Within 60 days of the subsequent sample analysis date, the Permittee shall propose measures to ensure that the exceedance of the standard or the presence of a toxic pollutant will be mitigated by submitting a corrective action plan to NMED for approval. The corrective action plan shall include a description of the proposed actions to control the source and an associated completion schedule. The plan shall be enacted as approved by NMED.

Once invoked (whether during the term of this Discharge Permit; or after the term of this Discharge Permit and prior to the completion of the Discharge Permit closure plan requirements), this condition shall apply until the Permittee has fulfilled the requirements of this condition and groundwater monitoring confirms for a minimum of two years of consecutive groundwater sampling events that the standards of Section 20.6.2.3103 NMAC are not exceeded and toxic pollutants are not present in groundwater.

2. **Ineffective groundwater monitoring well(s)** – In the event that information available to NMED indicates that a well(s) is not constructed in a manner consistent with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011*; contains insufficient water to effectively monitor groundwater quality; or is improperly located the Permittee shall install a replacement well(s) and shall survey the replacement monitoring well(s) within 120 days following notification from NMED.

Replacement well location(s) shall be approved by NMED prior to installation and completed in accordance with the attachment titled *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011*. The Permittee shall submit construction and lithologic logs, survey data and a groundwater elevation contour map to NMED within 60 days following well completion.

Upon completion of the replacement monitoring well(s), the monitoring well(s) requiring replacement shall be properly plugged and abandoned. Well plugging, abandonment and documentation of the abandonment procedures shall be completed in accordance with

the attachment titled Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions, Revision 1.1, March 2011, and all applicable local, state, and federal regulations. The well abandonment documentation shall be submitted to NMED within 60 days of completion of well plugging activities.

3. **Exceedance(s) of permitted maximum daily discharge volume** – In the event that the maximum daily discharge volume authorized by this Discharge Permit is exceeded by more than ten percent for any four average daily discharge volumes within any 12-week period the Permittee shall submit a corrective action plan to reduce the discharge volume for NMED approval.
4. **Exceedance(s) of Nitrogen Loading Limits** - In the event that the LADS show that the amount of nitrogen in wastewater and additional fertilizer applied to any field within the land application area in any 12-month period exceeds by more than 25% the amount reasonably expected to be taken up by the crop(s) and removed by harvesting, the Permittee shall propose the reduction of nitrogen loading to the land application area by submitting a corrective action plan to NMED for approval. The plan shall include a schedule for completion of corrective actions and shall be submitted within 90 days following the end of the monitoring period in which the exceedance occurred. The Permittee shall initiate implementation of the plan following approval by NMED.
5. **Impoundment(s) structural integrity compromised** - Any damage to the berms or the liner of an impoundment or any condition that exists that may compromise the structural integrity of the impoundment.

The Permittee shall propose the repair or replacement of the impoundment liner(s) by submitting a corrective action plan to NMED for approval. The plan shall be submitted to NMED within 30 days after discovery by the Permittee or following notification from NMED that significant liner damage is evident. The corrective action plan shall include a schedule for completion of corrective actions and the Permittee shall initiate implementation of the plan following approval by NMED.
6. **Spills, leaks, unauthorized discharge** – Any spill or release that is not authorized under this Discharge Permit. the Permittee shall comply with the requirements of Sections 20.6.2.1203 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of Sections 20.6.2.1203 NMAC.

- C. The Permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC, should the corrective action plan not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC within 180 days of confirmation of groundwater contamination.

PART C GENERAL TERMS AND CONDITIONS

C100 Legal

- A. Nothing in this Discharge Permit shall in any way, relieve the Permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders [20.6.2 NMAC].
- B. Pursuant to Section 20.6.2.3109 NMAC, NMED reserves the right to require a Discharge Permit Modification in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated or the standards of Section 20.6.2.3103 NMAC are being or may be violated. NMED may require more stringent requirements to protect groundwater quality if a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of groundwater quality. NMED may require the Permittee to implement abatement of water pollution and remediate groundwater quality.
- C. Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the Permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [74-6-10 WQA, 74-6-10.1 WQA]
- D. Pursuant to WQA 74-6-10.2(A-F), NMED shall assess criminal penalties for any person who knowingly violates or knowingly causes or allows another person to:
 - 1. Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA;
 - 2. Falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or
 - 3. Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation, is subject to felony charges and shall be sentenced in accordance with the provisions of Section 31-18-15 NMSA 1978.
- E. The Permittee shall notify the proposed transferee in writing of the existence of this Discharge Permit and include a copy of this Discharge Permit with the notice in accordance with 20.6.2.3111 NMAC, prior to the transfer of any ownership, control, or possession of this permitted facility or any portion thereof. The transferee(s) shall notify NMED, in writing, of the date of transfer of ownership and provide contact information for the new owner(s) pursuant to Subsection B of 20.6.6.12 NMAC. Submit to NMED notification of the transfer within 30 days of the ownership transfer date. [20.6.6.34 NMAC]

- F. Pursuant to WQA 74-6-5(o), the Permittee has a right to appeal the conditions and requirements as outlined in this Discharge Permit through filing a petition for review before the WQCC. Such petition shall be in writing to the WQCC within thirty (30) days of the receipt of this Discharge Permit. Unless a timely petition for review is made, the decision of NMED shall be final and not subject to judicial review.

C101 General Inspection and Entry Requirements

- A. Nothing in this Discharge Permit shall limit in any way, the inspection and entry authority of NMED under the WQA, 20.6.2 NMAC, or any other applicable law or regulation. [20.6.2.3107 NMAC, 74-6-9(B) & (E) WQA]
- B. The Permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]:
1. Enter at regular business hours or at other reasonable times upon the Permittee's premises or other location where records must be kept under the conditions of this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
 2. Inspect and copy, during regular business hours or at other reasonable times, any records required to be kept under the conditions of this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
 3. Inspect, at regular business hours or at other reasonable times, any facility, equipment (including monitoring and control equipment or treatment works), practices or operations regulated or required under this Discharge Permit, 20.6.2 NMAC, or any other applicable law or regulation.
 4. Sample or monitor, at reasonable times for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the WQA, any effluent, water contaminant, or receiving water at any location before or after discharge.

C102 General Record Keeping and Reporting Requirements

- A. The Permittee shall maintain a written record of the following:
1. Amount of wastewater, effluent, leachate or other wastes discharged pursuant to this Discharge Permit. [20.6.2.3107.A NMAC]
 2. Operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater; to measure flow rates, to monitor water quality, or to collect other data required by this Discharge Permit. Per Section A of 20.6.2.3107 NMAC, this record shall include:
 - a. Repair, replacement or calibration of any monitoring equipment
 - b. Repair or replacement of any equipment used in the Permittee's waste or wastewater treatment and disposal system.
 3. Any spills, seeps, and/or leaks of effluent, and of leachate and/or process fluids not authorized by this Discharge Permit. [20.6.2.3107.A NMAC]

- B. The Permittee shall maintain at its facility a written record of all data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit. The following information shall be recorded and shall be made available to NMED upon request:
1. The dates, exact place and times of sampling or field measurements;
 2. The name and job title of the individuals who performed each sample collection or field measurement;
 3. The date of the analysis of each sample;
 4. The name and address of the laboratory and the name and job title of the person that performed the analysis of each sample;
 5. The analytical technique or method used to analyze each sample or take each field measurement;
 6. The results of each analysis or field measurement, including raw data;
 7. The results of any split sampling, spikes or repeat sampling; and
 8. A description of the quality assurance (QA) and quality control (QC) procedures used.
- C. The Permittee shall furnish to NMED, within a reasonable time, any documents or other information which it may request to determine whether cause exists for modifying, terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The Permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]

C103 Modifications and/or Amendments

- A. The Permittee shall notify NMED of any changes to the Permittee's wastewater treatment and disposal system, including any changes in the wastewater flow rate or the volume of wastewater storage, or of any other changes to operations or processes that would result in any significant change in the discharge of water contaminants. The Permittee shall obtain NMED's approval, as a modification to this Discharge Permit pursuant to Subsections E, F, or G of 20.6.2.3109 NMAC, prior to any increase in the quantity discharged, or any increase in the concentration of water contaminants discharged, above those levels approved in this Discharge Permit [20.6.2.3107.C NMAC].
- B. The Permittee shall file plans and specifications with NMED for the construction of a wastewater system and for proposed changes that will change substantially the quantity or quality of the discharge from the system. The Permittee shall file plans and specifications prior to the commencement of construction. Changes to the wastewater system having a minor effect on the character of the discharge shall be reported as of January 1 and June 30 of each year to NMED. [20.6.2.1202 NMAC]

D100 Acronyms

Cl	chloride
CQA	construction quality assurance
CQC.....	construction quality control
DP	discharge permit
FEMA	Federal Emergency Management Administration
FIRM	flood insurance rate map
gpd	gallon per day
LADS	land application data sheet(s)
mg/L	milligram per liter
mL.....	milliliters
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMSA	New Mexico Statutes Annotated
NO ₃ -N	nitrate as nitrogen
SDDS	surface disposal data sheet(s)
SO ₄	sulfate
TDS	total dissolved solids
TKN.....	total Kjeldahl nitrogen
WQA	New Mexico Water Quality Act
WQCC	Water Quality Control Commission